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Iordan Ganev* (iganev@math.utexas.edu). *Quantum differential operators at a root of unity*. Preliminary report.

We introduce an algebra $\mathcal{D}_q(Q)$ of quantum differential operators associated to a quiver. When the parameter q is a root of unity, the algebra $\mathcal{D}_q(Q)$ contains a large center and is Azumaya over its center. This Azumaya algebra is split by a finite étale cover. A Hamiltonian reduction of $\mathcal{D}_q(Q)$ yields an Azumaya algebra on the multiplicative quiver variety, which is similarly split by a finite étale cover. (Received February 08, 2014)